

**APPLICATION OF ORGANIC WASTE AS LIQUID ORGANIC
FERTILIZER (LOF) AND THE TIME OF APPLICATION AND THEIR
EFFECT ON THE GROWTH ALSO PRODUCTION OF MUSTARD
PLANTS (*Brassica juncea* L.)**

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ABSTRACT

Organic waste is waste that if not managed will cause environmental pollution. This study aims to test whether liquid organic fertilizer (LOF) from organic waste is able to provide better growth and yields than conventional mustard (*Brassica juncea* L.) cultivation. The study was conducted in Baleharjo Village, Kapanewon Wonosari, Gunungkidul Regency in April-July 2022, using a factorial Completely Randomized Design (CRD) with two factors and one control and three replications. The first factor is the type of LOF, namely eggshell waste LOF, tempe liquid waste, vegetable and fruit waste and rabbit urine. The second factor is the time of application, namely in the morning, afternoon and morning also afternoon. The control treatment was mustard cultivation as was done by farmers in Gunungkidul. The results showed that there was a significant interaction between the treatment combinations on the root volume. LOF of rabbit urine had the best effect on the plant height, number of leaves, leaf width, leaf length, leaf area index, plant biological weight and plant economic weight. Morning and evening application time had the best effect on leaf area index and leaf length. The control treatment was significantly higher than the combination treatment on the plant height, number of leaves, leaf width, leaf length, leaf area index, root volume, plant biological weight, total dry weight, crown dry weight, akae dry weight and plant economic weight.

Keywords: Mustard, Organic waste, Liquid Organic Fertilizer, Time